



2015 Washington County

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# COMMUNITY HEALTH ASSESSMENT

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## An Invitation to our Community

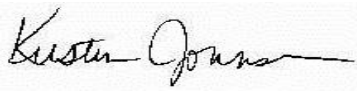
The Washington County Community Health Assessment is a compilation of health information collected from numerous sources to inform all of us about the health needs of our community. The goal of this assessment is to lay the groundwork to an ongoing collaborative and comprehensive approach to improve the health of all Washington County residents. Our hope is this assessment will be used as a resource and guiding document for our community partners to work collectively in their health promotion efforts.

The Washington County Community Health Assessment is most effectively used as a call to action. We all strive to make Washington County a healthier place to live, work, play, and visit. If we work collaboratively with dedication and commitment and measure our improvements, we will improve our health status.

Thank you to all of our partners and colleagues for the work you do to maintain and improve the health of our community. Together we can make sustainable change.

If you are interested in working with us to improve the health of Washington County please contact me at [kjohnson@co.ozaukee.wi.us](mailto:kjohnson@co.ozaukee.wi.us)

Warmly,

A handwritten signature in black ink, reading "Kirsten Johnson", with a long horizontal flourish extending to the right.

Kirsten Johnson, MPH, CPH, CHES  
Health Officer/Director  
Washington Ozaukee Public Health Department

# ACKNOWLEDGEMENTS

Washington County Health Department would like to acknowledge the following community partners for their contributions to the Community Health Assessment (CHA), who provided direction and leadership to the CHA, assured compilation and shared data and engaged residents of Washington County through a series of surveys:

Aurora Health Care

Froedert & the Medical College of Wisconsin

Columbia St. Mary's Hospital

Children's Hospital of Wisconsin

Center for Urban Population Health

Elevate, Inc.

United Way of Washington County

Washington County Health Department

Washington County Sheriff's Department

# PROCESS

## **Community Health Needs Assessment (CHA)**

The purpose of the Community Health Needs Assessment (CHA) is to provide Washington County with information for an assessment of the health status of residents. Primary objectives are to:

1. Gather specific data on behavioral and lifestyle habits of the adult population.
2. Gather data on the prevalence of risk factors and disease conditions existing within the adult population.
3. Compare, where appropriate, health data of residents to previous health studies.
4. Compare, where appropriate and available, health data of residents to state and national measurement along with Health People 2020 goals.

This report was commissioned by Aurora Health Care, Froedert & the Medical College of Wisconsin, Children's Hospital of Wisconsin and Columbia St. Mary's in partnership with the Washington County Health Department. The community health survey is supported by additional data collected and analyzed by the Center for Urban Population Health. Secondary data included the County Health Rankings, US Census Bureau, American Community Surveys, Healthy People 2020, and Healthiest Wisconsin 2020.

# DESCRIPTION OF WASHINGTON COUNTY



## Geography & Environment

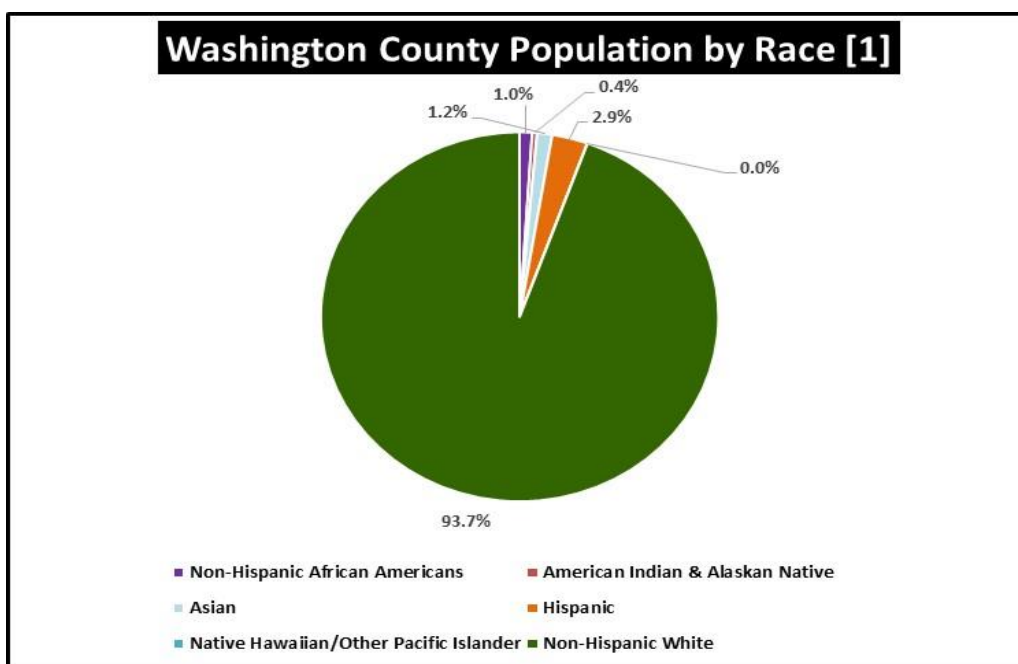
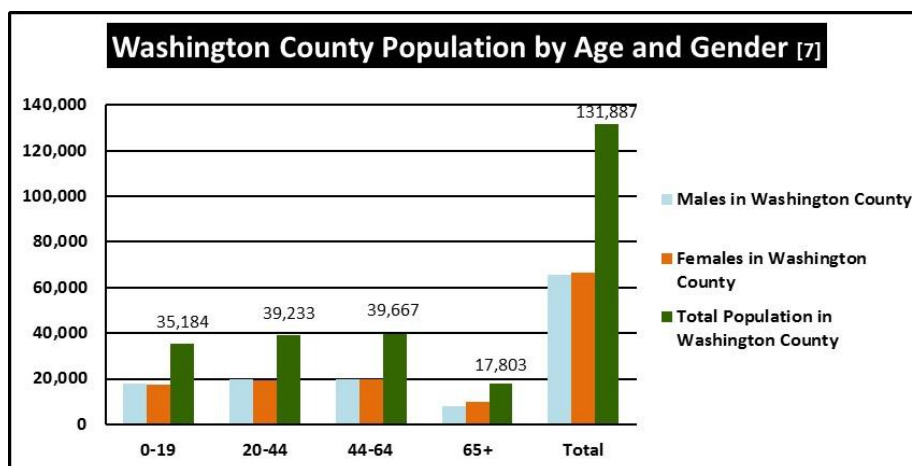
With the landscape carved by glaciers and towered by the historical landmark of Holy Hill, Washington County provides an atmosphere for family living, business, and industry. Washington County has well-known major manufacturing industries including: machine tooling, metal fabrication, printing, pharmaceutical distribution, photo finishing, and trucking. The location along the US Highway 45 and US Highway 41 corridors makes Washington County an ideal location for trade, business, and retail [6].

Ancient glaciers, inland lakes and woodlands form the foundation for a variety of recreational activities. Hiking, hunting, boating, fishing, golfing, skiing, and snowmobiling are among the many outdoor activities for sport enthusiasts. The Ice Age National Service Trail provides for the enjoyment of wild flowers and wildlife appreciation [6].

According to the U.S. Census Bureau, the county has a total area of 436 square miles, of which 431 square miles is land and 5 square miles is water.

## County Demographic Profile

The total population of Washington County is 131,887 with 50.3% of the population female and the majority of residents between the ages of 20-64 [7]. The ethnic make-up is 93.7% white [1].



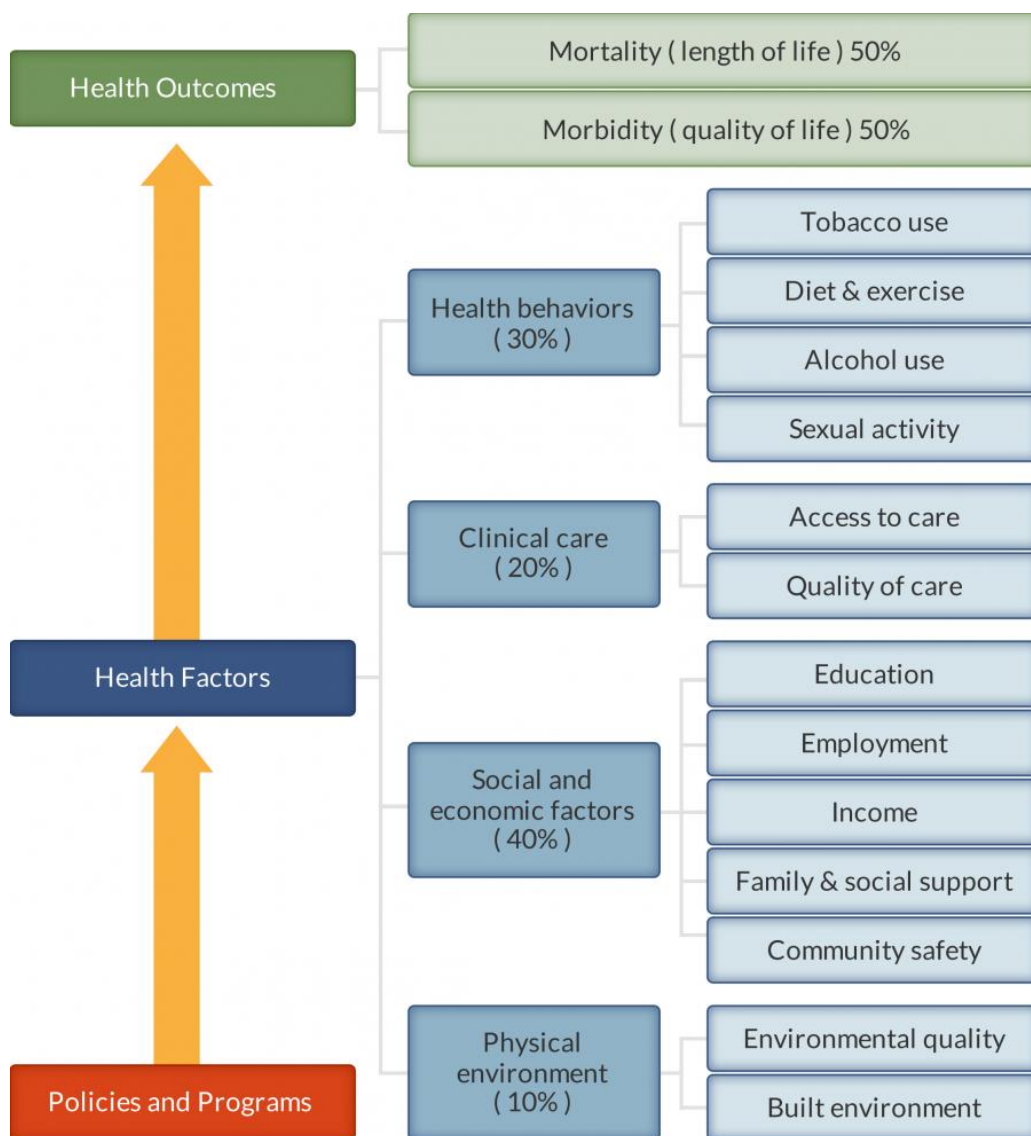
## FACTORS THAT INFLUENCE COMMUNITY HEALTH

The County Health Rankings help communities create solutions that make it easier for people to be healthy in their own communities, focusing on specific factors that are known to affect health, such as education and income. Ranking the health of nearly every county in the nation, the County Health Rankings illustrate what is known when it comes to what is making people sick or healthy.

The County Health Rankings illustrate that much of what affects health occurs outside of the doctor's office. The Rankings help counties understand what influences how healthy residents are and how long they will live. The Rankings look at a variety of measures that affect health such as the rate of people dying before age 75, high school graduation

rates, unemployment, limited access to healthy foods, air and water quality, income, rates of smoking, obesity, and teen births. Based on data available for each county, the Rankings are unique in their ability to measure the overall health of each county in all 50 states on the many factors that influence health, and they have been used to garner support among government agencies, healthcare providers, community organizations, business leaders, policymakers, and the public for local health improvement initiatives. [1]

The Rankings are based on a model of population health that emphasizes the many factors that, if improved, can help make communities healthier places to live, learn, work and play. [1]

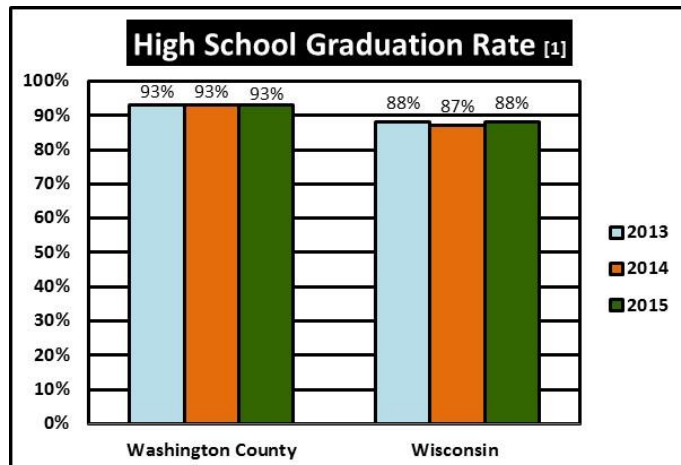


County Health Rankings model ©2012 UWPHI



# SOCIAL AND ECONOMIC FACTORS THAT INFLUENCE HEALTH IN WASHINGTON COUNTY

## Education



Years of formal education are correlated strongly with improved work and economic opportunities including higher income, better working conditions, access to health care, more stability during variations in the job market, reduced psychosocial stress through a greater sense of personal control, and in general, healthier lifestyles. [1]

Even after controlling for income and health insurance status, education still has a significant effect on health outcomes. In addition, there are multi-generational health effects because the educational level of parents affects the health of their children through resources available for the children and through the quality of the schools their children attend. [1]

Reading is a critical predictor of high school success or failure. Poor readers are more likely to drop out of school. Dropouts are more likely to be unemployed, to earn low wages and to end up on welfare or in prison.

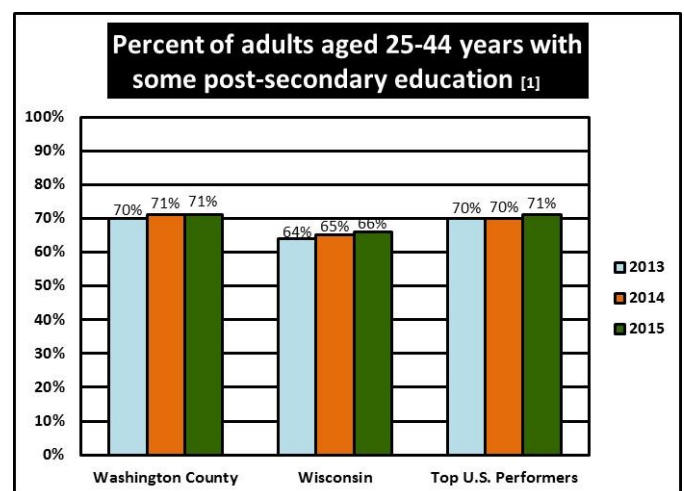
## Health Literacy

Health literacy is defined as the degree to which individuals have the capacity to obtain, process, and understand basic health information and services needed to make appropriate health decisions. Adults with less than average health literacy are more likely to have poor health status.

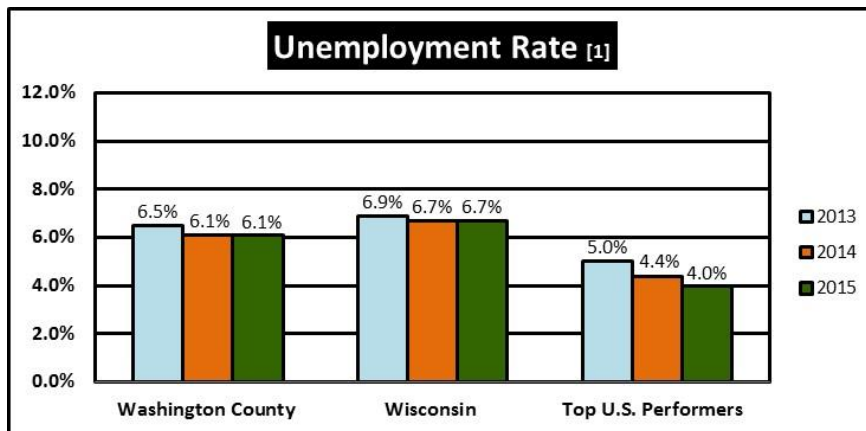
There is a striking difference between health literacy levels based on education. The percent of people with below basic literacy skills is [1,2]:

- 3% in college graduates
- 15% in high school graduates
- 49% in adults who have not completed high school

There is limited data on “health literacy” in Wisconsin. Therefore, general literacy data is used as a proxy to represent this topic.

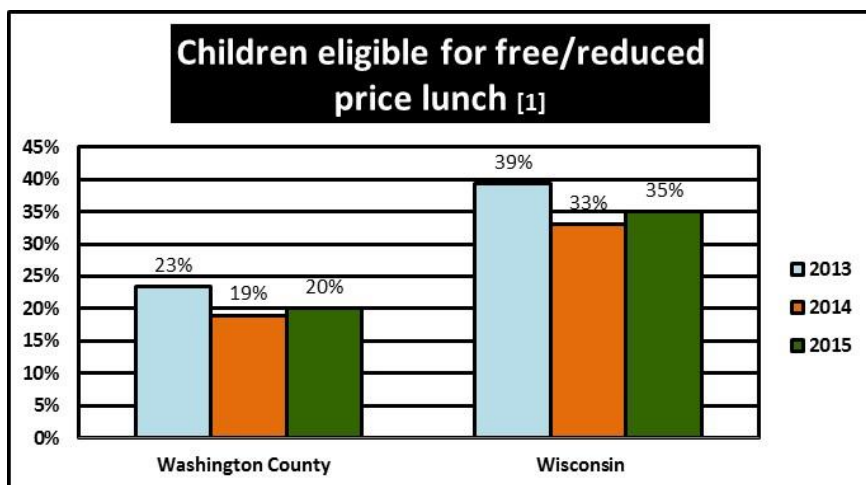


## Employment and Income



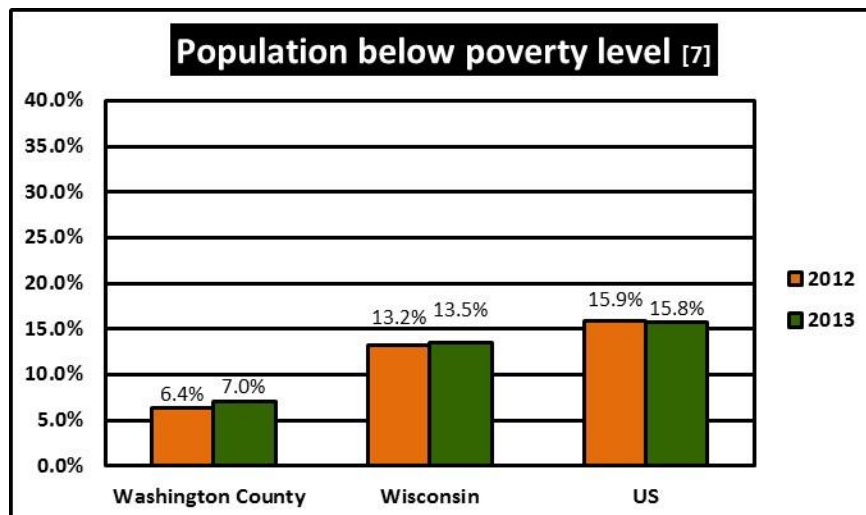
Almost 25% of adults in the United States earn less than \$27,000 a year in jobs that offer no health care, vacation, or paid sick leave [3]. Additionally, 40% of all households in the US earn below 250% of the federal poverty level [3].

Unemployment and under-employment affect health outcomes in several ways. Unemployment leads to an increase in unhealthy behaviors such as alcohol use, tobacco use, poor diet, and lack of exercise.



These behaviors, in turn, can lead to higher risk of disease and premature death [1]. Some studies indicate that unemployment can lead to physical illness and even death (especially by suicide) [1]. Unemployment can also reduce access to health care (because insurance is often tied to employment).

While poverty data usually uses the federally established poverty level, a good general definition of poverty is: insufficient income to meet the needs for food, clothing, and shelter. Adequate income is important in obtaining health insurance, paying for medical care, and having access to other basic goods.



Poverty leads to increased risk of a variety of medical conditions and diseases, depression, intimate partner violence, poor health behaviors, and death. Children in poverty have higher rates of illness and premature death largely due to accidental injury and lack of health care access.

In Washington County, 8% of children under the age of 18 are living in poverty, compared to 18% in Wisconsin and 13% in the United States [1].

### **Family and Social Support**

Poor family support, minimal contact with others, and limited involvement in community life are associated with increased morbidity and early mortality. A 2001 study found that the magnitude of health risk associated with social isolation is similar to the risk of cigarette smoking [8]. Furthermore, social support networks have been identified as powerful predictors of health behaviors, suggesting that individuals without a strong social network are less likely to make healthy lifestyle choices than individuals with a strong network.

A study that compared Behavioral Risk Factor Surveillance System (BRFSS) data on health status to questions from the General Social Survey found that people living in areas with high levels of trust in society are less likely to rate their health status as fair or poor than people living in areas with low levels of social trust [9].

Both adults and children in single-parent households are at higher risk for unhealthy behaviors such as smoking and excessive alcohol use, adverse health outcomes, and premature death. Self-reported health among single parents (both male and female) were found to be worse than for parents living as couples, even after controlling for socioeconomic characteristics.

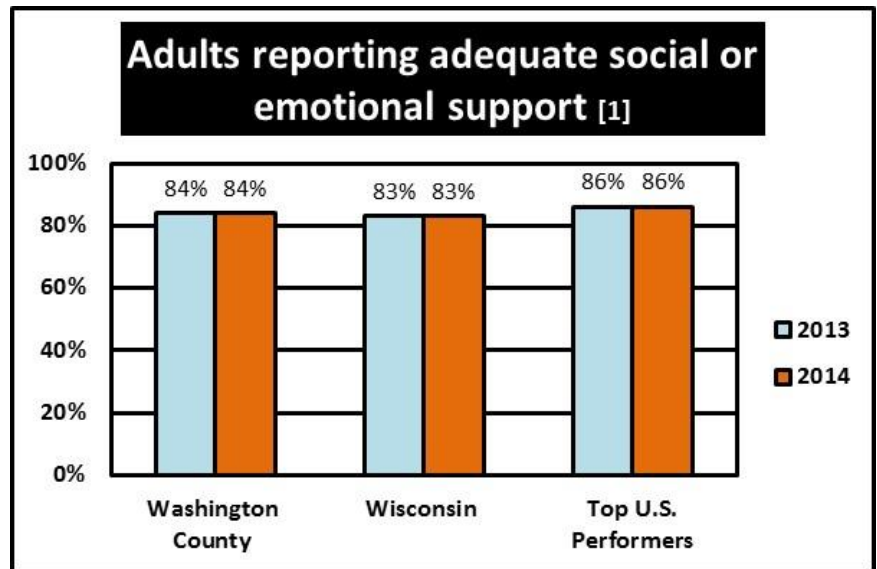
### **Community Safety**

High levels of violent crime compromise physical safety and psychological well-being. High crime rates can also deter residents from pursuing healthy behaviors such as exercising outdoors. Additionally, exposure to crime and violence has been shown to increase stress, which may exacerbate hypertension and other stress-related disorders and may contribute to obesity prevalence [1].

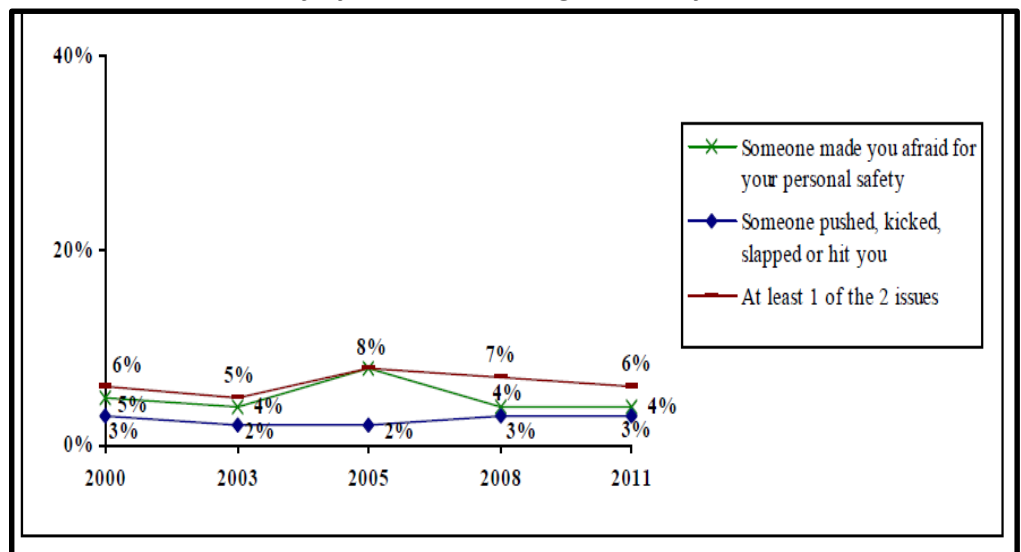
Violence against others has a major impact in the US:

- 18,000 deaths per year
- Approximately 268,000 cases of hospitalized violence-related injury
- Homicide is the 2nd leading cause of death in ages 15 – 24

According to the 2015 County Health Rankings, Washington County had 98 violent crimes per 100,000 people, which is significantly less than the Wisconsin rate of 255 violent crimes per 100,000 people.



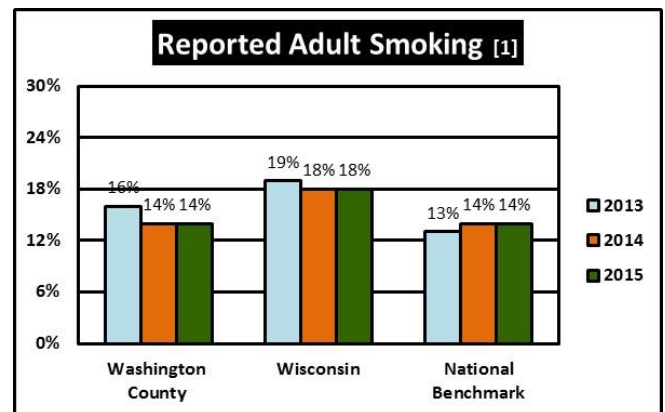
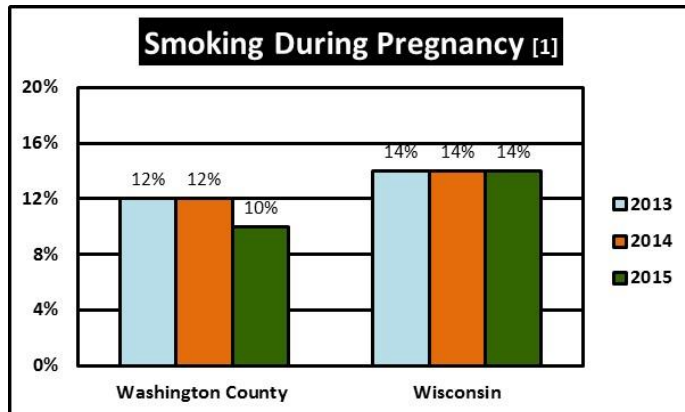
***Personal Safety Issues in Washington County [11]***



# BEHAVIORAL FACTORS THAT INFLUENCE HEALTH IN WASHINGTON COUNTY

## Tobacco Use

Tobacco use is the single most preventable cause of death and disease in the US. Every year in the US there are 443,000 deaths due to tobacco. Tobacco use accounts for 11% of Medicaid costs and nearly 10% of Medicare costs. Annual health care costs are \$2,000 higher for smokers than nonsmokers. [15] Every year in Wisconsin there are 8,000 deaths due to tobacco use, \$2.2 billion in direct health care costs, and \$1.6 billion in lost product. [12]



## Alcohol Use

In the US, an estimated 22 million people per year have drug and alcohol problems. Approximately 80,000 deaths annually in the US are attributed to excessive drinking. Alcohol-related deaths are the fourth leading cause of death in Wisconsin. It is the third leading lifestyle-related cause of death. Wisconsin's rates for various measures of alcohol use and abuse are among the highest in the nation. [12]

Excessive drinking is a risk factor for a number of adverse health outcomes such as alcohol poisoning, hypertension, acute myocardial infarction, sexually transmitted infections, unintended pregnancy, fetal alcohol syndrome, sudden infant death syndrome, suicide, interpersonal violence, and motor vehicle crashes.

In 2013, 216 citations were issued by Washington County Sheriff Deputies for Operating While Intoxicated (OWI) with 183 citations also being issued for Prohibited Alcohol Concentration (PAC). In Wisconsin, a person is first arrested and issued a citation for OWI. Drunk driving continues to be a concern in Washington County. [14]

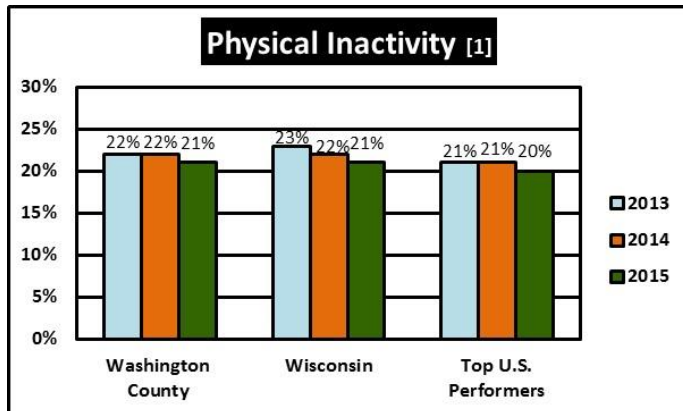
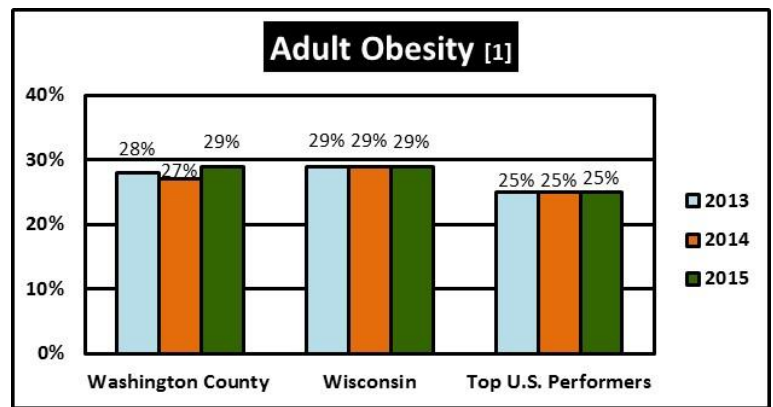


## Heroin and Opiates

In Wisconsin, the number of overdose deaths annually involving prescription painkillers and heroin now exceeds the number of traffic fatalities. In Washington County, 8.5% 10<sup>th</sup> grade students reported abusing prescription drugs in the last 30 days.[23] Between 2009-2013 Washington County reported seven heroin overdose deaths. [24]

## Obesity

Obesity is often the result of an overall energy imbalance due to poor diet and limited physical activity. Obesity increases the risk for health conditions such as coronary heart disease, type 2 diabetes, cancer, hypertension, hyperlipidemia, stroke, liver and gallbladder disease, sleep apnea and respiratory problems, osteoarthritis, and poor health status.

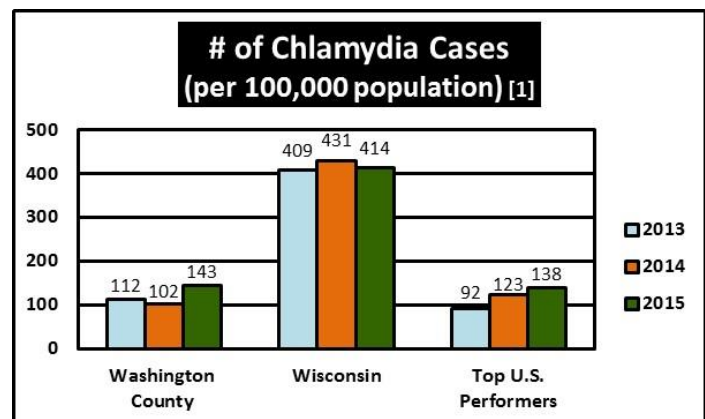


## Physical Inactivity

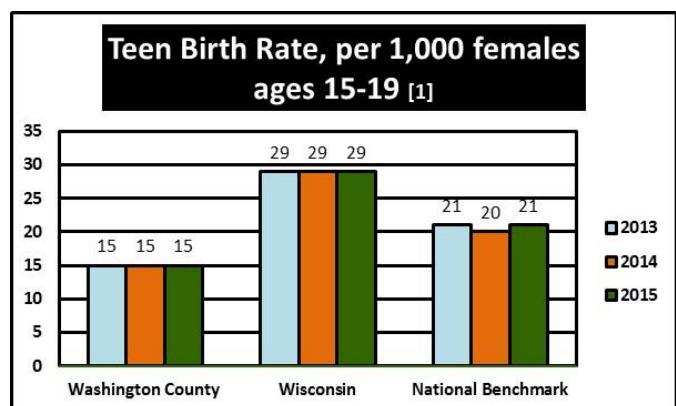
Decreased physical activity has been related to several disease conditions such as type 2 diabetes, cancer, stroke, hypertension, cardiovascular disease, and premature mortality (independent of obesity). In addition, physical inactivity at the county level is related to health care expenditures for circulatory system diseases. [1]

## Reproductive and Sexual Health

Sexually Transmitted Infections (STIs) are associated with a significantly increased risk of morbidity and mortality, including increased risk of cervical cancer, involuntary infertility, and premature death. The CDC's newest estimates show that there are about 20 million new infections in the United States each year, with the majority affecting 15 to 24-year-olds. There was a 2.8% increase in chlamydia since 2013, and reports of syphilis increase by 15.1%. [25] In Washington County, there were 244 reported cases of Chlamydia, 25 cases of Gonorrhea and 3 cases of Syphilis.



Evidence suggests teen pregnancy significantly increases the risk of repeat pregnancy and of contracting a STI, both of which can result in adverse health outcomes for mothers, children, families, and communities. Pregnant teens are more likely than older women to receive late or no prenatal care, have gestational hypertension and anemia, and poor maternal weight gain. Teens are also more likely than older women to have a pre-term delivery and low birth weight baby, increasing the risk of child developmental delay, illness, and mortality. [1]



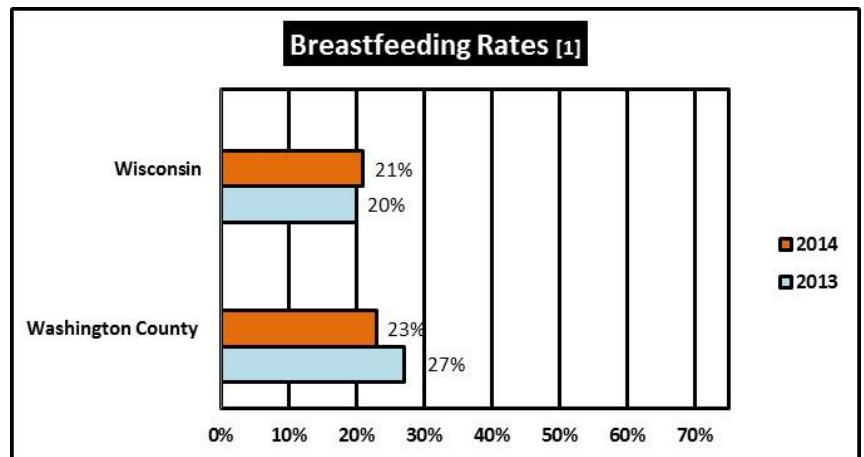


### Breastfeeding

Breastfeeding is known to provide significant health benefits to both the child and the mother. Recent research shows that if 90 percent of families' breastfed exclusively for 6 months, nearly 1,000 infant deaths could be prevented. [21]

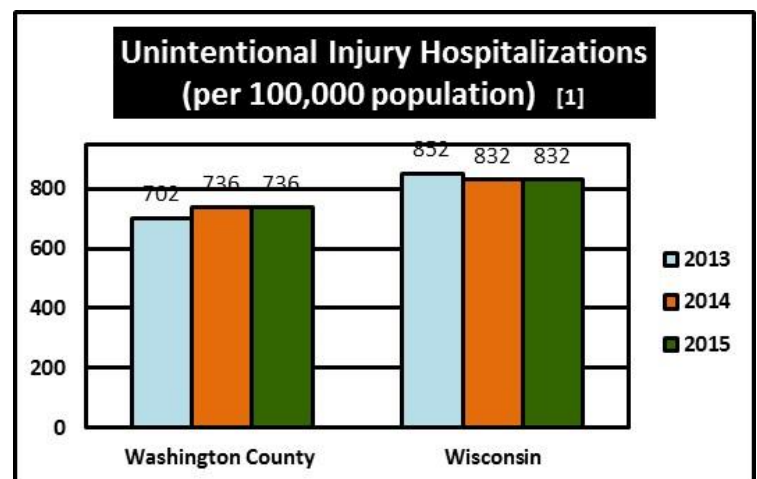
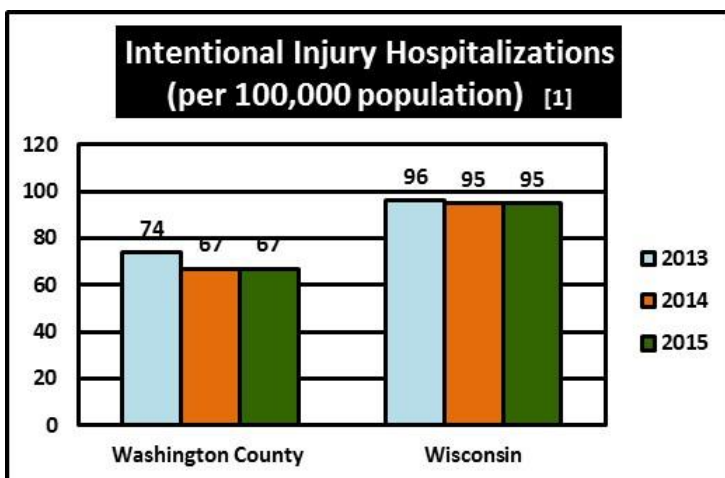
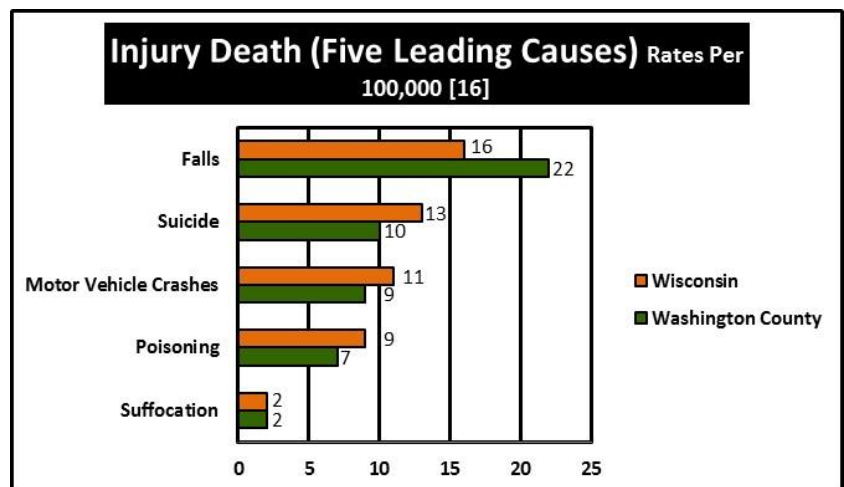
The United States would also save \$13 billion per year — medical care costs are lower for fully breastfed infants than never-breastfed infants. Breastfed infants typically need fewer sick care visits, prescriptions, and hospitalizations, resulting in a reduction of employer medical costs. Breastfeeding also contributes to a more productive workforce since mothers miss less work to care for sick infants. [21]

The measure above represents the percentage of infants breastfed exclusively through three months whose mothers qualify for and receive Wisconsin Infant and Children (WIC) nutrition assistance funds.



### Unintentional/Intentional Injury

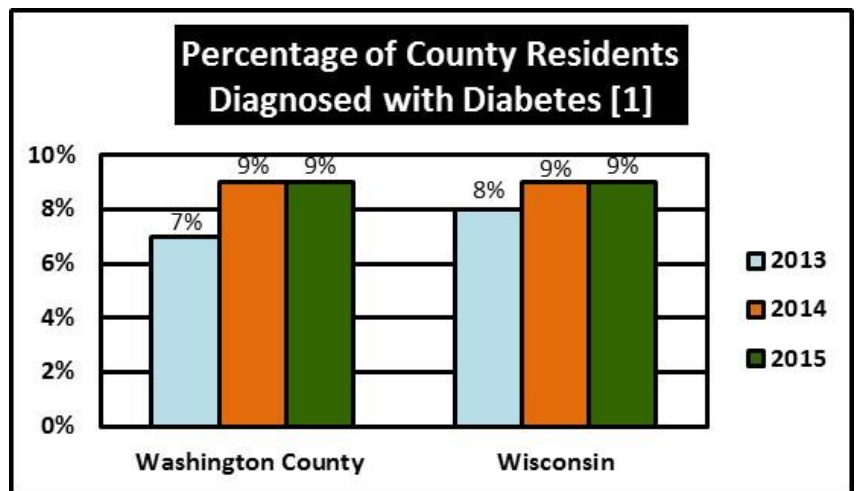
Injury is the leading cause of disability and is also the leading cause of death among 1-44 years olds. Injuries tend to be coined as “accidents” or “acts of fate”, when in actuality most injuries are predictable and preventable. According to the 2011 Burden of Injury Report, the top three causes of injury related deaths in Washington County are falls, suicide, and motor vehicle crashes. [16]



## Chronic Disease

Chronic diseases include heart disease, stroke, cancer, diabetes, and asthma. They can often be prevented by having a healthy diet, increasing physical activity, and by eliminating tobacco use and substance abuse. Chronic diseases are important public health issues to address because they can be prevented and effective condition management can prevent more serious complications.

Diabetes affects 25.8 million people in the US and is the 7th leading cause of death. One in every five US health care dollars is spent caring for people with diagnosed diabetes. [19]

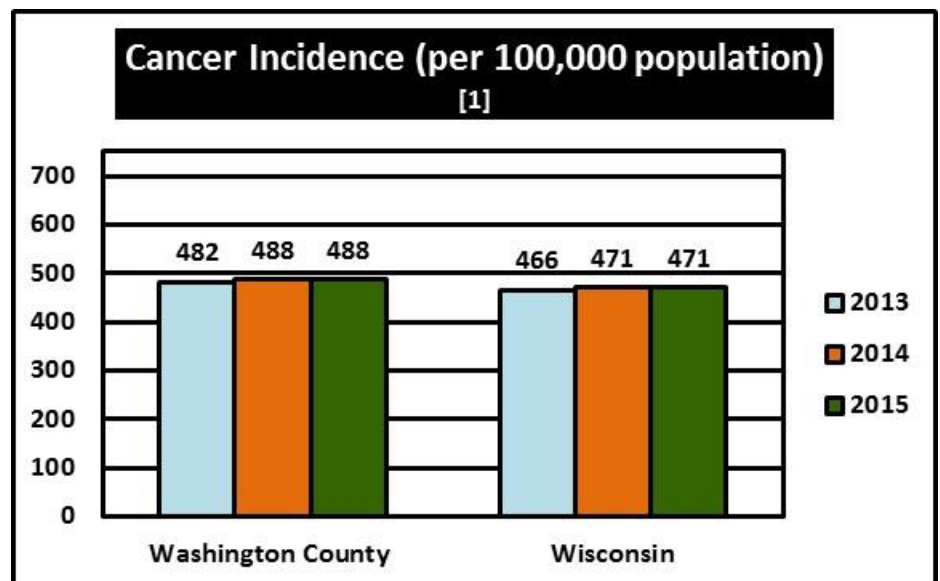


Cancer is the 2nd leading cause of death in the US. The risk factors include use of tobacco, physical inactivity and poor nutrition, obesity, and UV light exposure. Cancer incidence can be reduced through early screening, vaccination, and other prevention efforts. [20]

The Susan G. Komen Foundation published “Quantitative Data Report: Measuring Breast Cancer Impact in Local Communities, 2007-2011” and identified Washington County as the Southeast Wisconsin Affiliate’s highest need community. In comparison to other southeast Wisconsin counties, Washington County is in the highest tier for breast cancer incidence rate, death rate, and death rate trends. [22]

Asthma affects more than 23 million people in the US. According to the BRFSS, approximately 12% of adults and 11% of children have asthma. [10]

Coronary heart disease is the leading cause of death in the US. The risk factors include high blood pressure, high cholesterol, cigarette smoking, diabetes, poor diet and physical activity, overweight and obesity. Cardiovascular disease accounts for 20% of medical expenditures in the US. [15]



## Communicable Disease

Communicable diseases are recorded to monitor their incidence, prevalence, and distribution patterns. This helps epidemiologists prepare for and prevent mass outbreaks from communicable diseases. Prompt identification and control can reduce illness, death, health care costs and absenteeism.

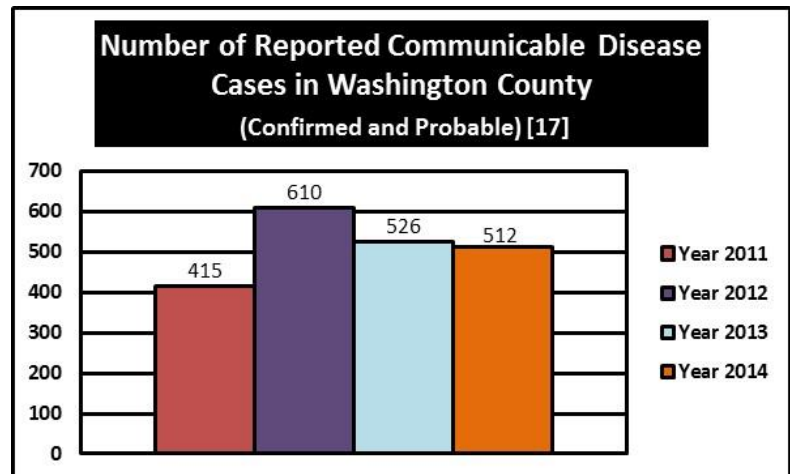
In the US each year, 42,000 adults and 300 children die of vaccine-preventable diseases. Each birth cohort vaccinated with the routine schedule of childhood vaccines: [15]

- Saves 33,000 lives
- Prevents 14 million cases of disease
- Reduces direct health care costs by \$9.9 billion

Viral hepatitis, influenza and TB are among the leading causes of illness and death in the US [15].

In 2014, the following are the reported cases of disease in Washington County:

- Influenza: 97
- Hepatitis C: 29
- Pertussis: 5
- E. Coli: 7

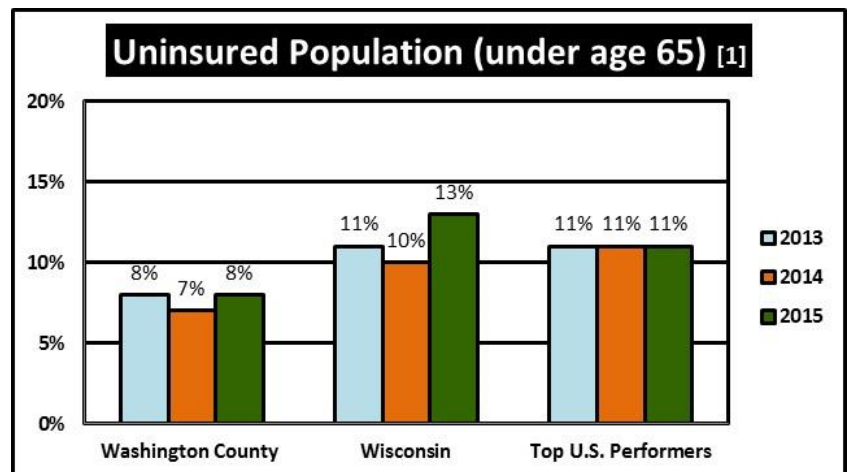


## CLINICAL CARE FACTORS THAT INFLUENCE HEALTH IN WASHINGTON COUNTY

### Access to Care

Access to health care includes medical, dental and mental health care. There are many aspects to having access to care. Coverage (having health insurance) is essential but does not ensure access. It is also necessary to have:

- Comprehensive coverage, including preventive services
- Providers that accept the individual's insurance
- Sufficient access to local providers
- Services from a usual and ongoing source (a "medical home")



Having a usual and ongoing source of primary care is associated with greater patient trust in the provider, good patient-provider communication, and increased likelihood that the patient will receive appropriate care. These can then lead to better health outcomes, fewer disparities, and lower costs [15].

Ratio of Population to Primary Care Physicians [1]	2015
Washington County	1,598:1
Wisconsin	1,215:1
National Benchmark	1,045:1



### Dental/Oral Health Services

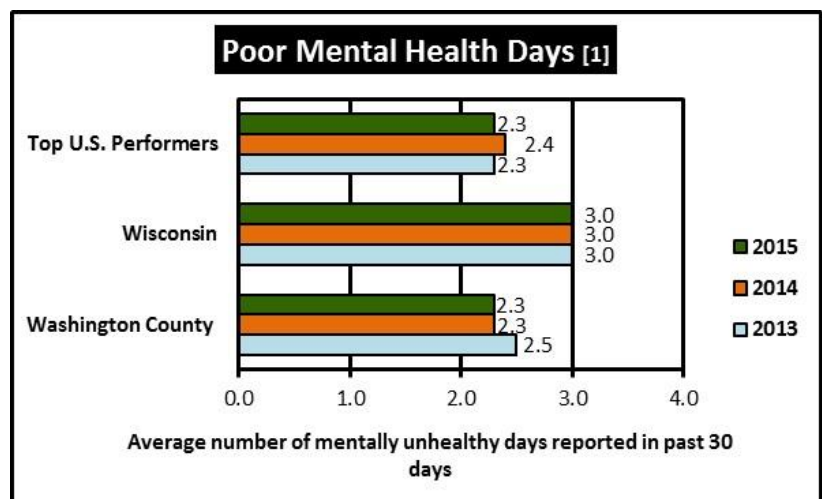
Untreated dental disease can lead to serious health effects including pain, infection, and tooth loss. Although lack of sufficient providers is only one barrier to accessing oral health care, much of the country suffers from shortages. According to 2015 data, the ratio of the population to dentists in Washington County is 2,074:1. This is significantly worse than the state ratio of 1,631:1. [1]

However, having an adequate supply of dentists does not ensure that people will seek care efficiently. The measure does not report patient satisfaction with the care they receive, how often they make use of dental services, if the dentist in their area accepts their type of insurance, or how long they have to wait to see a dentist. This suggests that while the measure provides an estimate of dental access at the county level, it does not account for all of the barriers to access that individuals may encounter. [1] According to the 2015 County Health Rankings, in Washington County only 14% of individuals over the age of two did not have a dental visit in the past 12 months, compared to 24% at the state level.

### Mental Health

Mental health can be defined as a state of successful mental function, resulting in productive activities, fulfilling relationships, ability to adapt and cope with challenges. Mental health is essential to personal well-being, relationships, and the ability to contribute to society.

Mental disorders are one of the most common causes of disability. Approximately, 13 million adults have seriously debilitating mental illness each year in the US. Approximately 20% of the population experiences a mental health problem during any given year. Suicide is another major preventable public health problem. It is the 11th leading cause of death overall in the US with 30,000 deaths per year. [15]

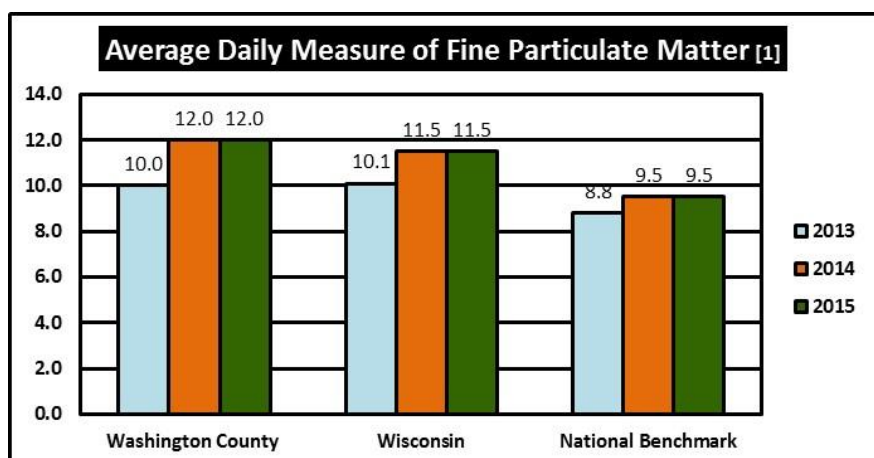


In 2015, the ratio of the population to mental health providers in Washington County is 1,252:1. This is significantly worse than the state ratio of 623:1. [1]

## PHYSICAL ENVIRONMENT FACTORS THAT INFLUENCE HEALTH IN WASHINGTON COUNTY

### Environmental Health

The natural environment includes a variety of factors that influence the health of our community, particularly air and water quality. Poor air and water quality have the greatest impact on the very young, the old, and those with chronic health conditions.



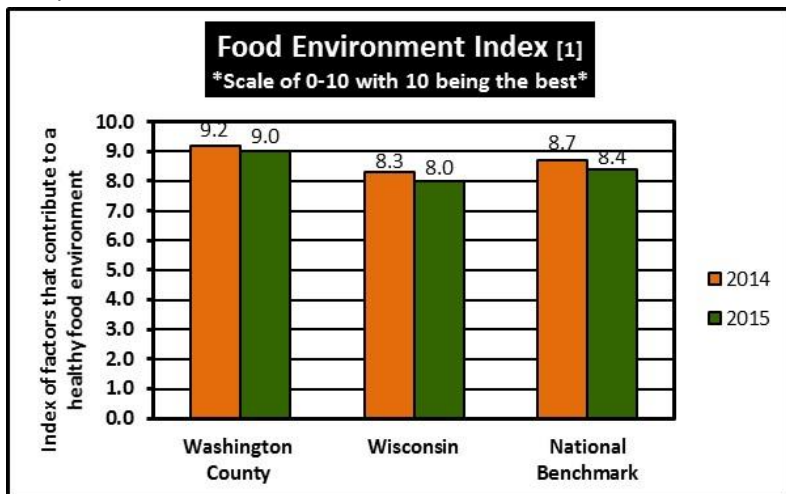
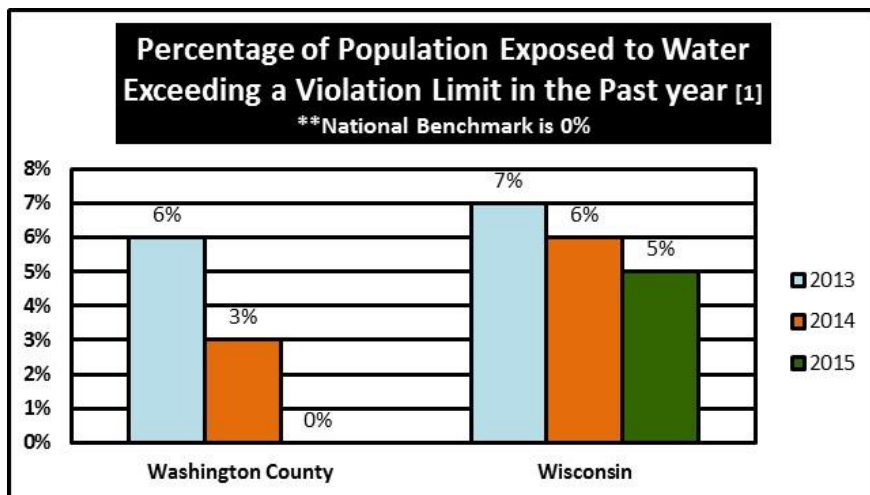
Air pollution can lead to decreased lung function, chronic bronchitis, and asthma. Exposure to high levels of ozone or fine particulate matter leads to higher rates of emergency room visits and hospitalizations for people with asthma and other respiratory problems. It can also lead to higher risk of death due to heart and lung conditions. [1]

Municipal water supplies are regularly tested and treated so they pose less risk of adverse health conditions. Therefore, two measures are used to indicate the potential impact of the water supply on the community:

- Percent of the population using municipal water
- Percent of the population exposed to contaminants in municipal water each year.

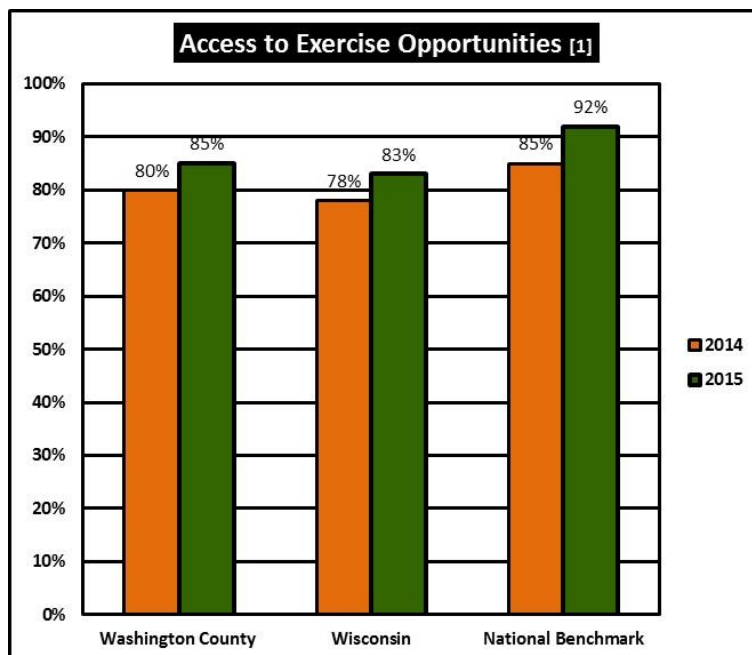
### **Built Environment**

The built environment includes human-made resources and infrastructure such as buildings, roads, parks, restaurants, and grocery stores. Built environment health hazards can be reduced through engineering, regulation, safe work practices, and other methods.



One critical aspect of the built environment is having access to healthy foods. Not having access to fresh fruits and vegetables is related to premature mortality. Too much access to fast food restaurants and residing in a food desert correlate with: overweight, obesity, and premature death. A “food desert” is a neighborhood where a high proportion of the residents have low access to a supermarket or large grocery store (more than a mile in urban areas and more than ten in rural areas). [1]

Access to recreational facilities has a strong relationship with physical activity levels in adults and children and is linked to lower obesity levels. Increasing access to recreational facilities is one of the CDC’s twenty-four recommended strategies to reduce obesity. [12]



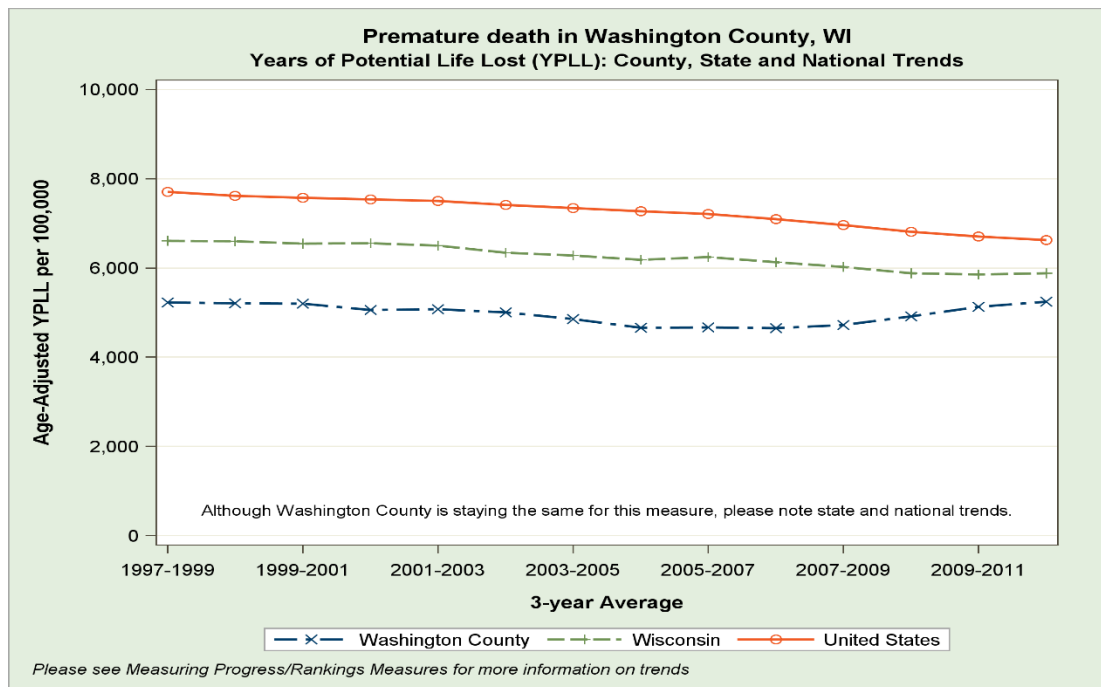
# HEALTH OUTCOMES

Health outcomes represent how healthy a county is. The County Health Rankings measure how long people live (length of life) and how healthy people feel while alive (quality of life) to determine the health outcomes of a county.

## Length of Life (Mortality)

The County Health Rankings measure the burden of premature deaths. Premature deaths are deaths that occur before a person reaches an expected age. Many of these deaths are considered to be preventable. Every death occurring before the age of 75 contributes to the total number of years of potential life lost. For example, a person dying at age 25 contributes 50 years of life lost, whereas a person who dies at age 65 contributes 10 years of life lost. [1]

In 2015, Washington County ranked in the top 20 of Wisconsin counties (19). Premature death in Washington County was estimated at 5,246 lost years. [1]



## Quality of Life (Morbidity)

Quality of life refers to how healthy people feel while alive. The measures of quality of life are people's health-related quality of life and birth outcomes. [1]

In 2015, Washington County ranked in the top 10 of Wisconsin counties (7). The percentage of poor or fair health in Washington County (10%) is below the state of Wisconsin (12%) and equal to the national average (10%). However, the percentage of low birthweight in Washington County (5.8%) is lower than both the state of Wisconsin (7.0%) and the national average (5.9%). [1]

Measure	Washington	WI	National Average
Poor or fair health	10%	10%	12%
Poor physical health days	2.4	2.5	3.2
Poor mental health days	2.3	2.3	3.0
Low birthweight	5.8%	5.9%	7.0%

# INITIATIVES AND COALITIONS THAT ADDRESS HEALTH IN WASHINGTON COUNTY

Well Washington County is a county-wide health coalition working collaboratively to sustain and improve the health of Washington County residents through increasing physical activity and nutrition, improving mental health, reducing alcohol, drugs and tobacco use, and expanding workplace wellness.

The Washington Ozaukee Public Health Department, in collaboration with numerous community partners, formed the Well Washington County coalition in February 2016. Well Washington County was developed to identify Washington County resident's health priorities and work towards improving health outcomes through community based action teams and a leadership council.

Leveraging the expertise and resources of the larger group, we are able to target, assess, and address the health behaviors and the social determinants of the health of the broader community.

## **Vision**

Washington County: Healthy People, Communities, Workplaces and Environment.

## **Mission**

Working to improve the health of Washington County through employers and community partners.

## **Purpose**

The purpose of Well Washington County is to mobilize residents, organizations, employers and stakeholders to make an economic and measurable impact on the health needs of Washington County.

## **Action Teams**

### **Eat & Move Well**

To reduce the burden of chronic disease in Washington County by collaborating on the development and implementation of effective nutrition and physical activity strategies.

### **Choose Well**

Support community actions to reduce at-risk behaviors.

### **Think Well**

To provide the knowledge our community needs and the access necessary for early intervention and continued treatment of mental illness and/or substance abuse.

### **Work Well**

To provide an opportunity for Washington County employers to network, share best practices and participate in trainings.



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